WHAT IS CLAIMED IS:

1. A method of using an infrared reading to detect the misidentification of a diagnostic test strip, said method comprising the step of:

determining if the infrared reflectance of one or more reagents are within an acceptable predetermined range.

2. The method of Claim 1, further comprising the step of aborting the test if said infrared reflectances are not within said range.

3. The method of Claim 1 wherein said reagents are leukocyte, glucose and albumin.

4. The method of Claim 3 wherein said predetermined infrared reflectance range of said leukocyte reagent is from about 57.0 to about 73.0 percent infrared reflectance.

5. The method of claim 3 wherein predetermined infrared reflectance range of said glucose reagent is from about 75.0 to about 90.0 percent infrared reflectance.

6. The method of claim 3 wherein the predetermined range of said albumin reagent is from about 60.0 to about 75.0 percent infrared reflectance.

7. The method of Claim 2 wherein said test will be aborted if said test strip is more than about 0.020" from a central location on a feed table or if said test strip is incompletely inserted by more than about 0.050".

8. An automated method of using an infrared reading to detect the misidentification of a diagnostic test strip disposed on a feed table comprising the steps of:

determining if said test strip possesses specified reagents;

locating the position of said reagents on said strip;

reading the infrared reflectances from the reagent positions; and

determining if said infrared reflectances are within an acceptable predetermined range.

9. The method of Claim 8, further comprising the step of aborting said method if said infrared reflectances for one or more of said reagents are not within said predetermined range.

10. The method of Claim 8 wherein said reagents are leukocyte, glucose and albumin.

11. The method of Claim 10 wherein said predetermined infrared reflectance range of said leukocyte reagent is from about 57.0 to about 73.0 percent infrared reflectance.

12. The method of claim 10 wherein predetermined infrared reflectance range of said glucose reagent is from about 75.0 to about 90.0 percent infrared reflectance.

13. The method of claim 10 wherein the predetermined infrared reflectance range of said albumin reagent is from about 60.0 to about 75.0 percent infrared reflectance.

14. The method of Claim 9 wherein said test will be aborted if said test strip is more than about 0.020" from a central location on said feed table or if said test strip is incompletely inserted by more than about 0.050".

15. An automated method of reading a test strip for the analysis of one or more analyte(s) in a liquid test sample that comprises the steps of:

a) providing a test strip having at least one test field on its surface that reflects light at a specific range of wavelengths and at least two distinct marker fields on the same surface of said test strip as said test field, said marker fields reflecting light at different ranges of wavelengths from each other and from said test field in a coded sequence of ranges of wavelengths, said coded sequence correlates to information concerning identification of the test strip;

b) introducing said test strip into a strip reading device equipped with reading means for both said test field and said marker fields, said reading means comprises a light source as transmitter and a light sensitive element as receiver, said receiver being capable of differentiating between said ranges of wavelengths at which said test field and said marker fields reflect, said strip reading device also being equipped with means for correlating the coded range of infrared wavelength sequence of reflected light with preprogrammed

information concerning said test strip, said correlating means being in operative communication with a receiving means, said reading device having means for moving said test strip and said receiving means relative to one another so that the reflectance of said test field and said marker fields can be individually read by said reading means;

c) allowing said ranges of wavelength values reflected by said test field and said marker fields to be individually read by said reading means;

d) allowing said reading means to communicate said coded infrared sequence of spectral reflectance values reflected from said marker fields to said correlating means and allowing said correlating means to correlate said infrared sequence of reflected range of wavelength values with said preprogrammed information concerning said test strip; and

e) allowing said reading means to communicate said reflected range of infrared wavelength values to said correlating means and allowing said correlating means to determine, for one or more of the reagents disposed on said test strip, if said reflected range of infrared wavelength values are within a predetermined range of infrared reflectances.

16. The method of claim 15 wherein said test strip is placed on a feed table.

17. The method of claim 15 wherein said reagents comprise leukocyte, glucose and albumin.

18. The method of claim 17 further comprising the step of aborting said method if said infrared reflectances for one or more of said reagents are not within said predetermined range.

19. The method of claim 15 wherein said test will be aborted if said test strip is more than about 0.020" from a central location on said feed table or if the test strip is incompletely inserted by more than about 0.050".

20. The method of claim 18 wherein the predetermined infrared reflectance range for leukocyte is from about 57.0 to about 73.0 percent infrared reflectance.

21. The method of claim 18 wherein the predetermined infrared reflectance range for glucose is from about 75.0 to about 90.0 percent infrared reflectance.

22. The method of claim 18 wherein the predetermined infrared reflectance range for albumin is from about 60.0 to about 75.0 percent infrared reflectance.

23. The method of claim 15 wherein said range of wavelength value reflected from said test field and said marker fields are read by moving said test strip and said reading means relative to each other.

24. The method of claim 15 wherein said feed table is movable in relation to said reading means and wherein said test strip is placed on said feed table and moved relative to said reading means so that the reading means can scan the marker fields.

25. The method of claim 15 wherein said reading means is capable of acquiring spatial and spectral reflectances across the length of said test strip.

26. The method of claim 15 wherein said information concerning said test strip is calibration information based on the particular batch from which said test strip was obtained.

27. The method of claim 15 wherein said information concerning said test strip relates to location of reactive areas, critical times, strip age and strip reactivity.

28. The method of claim 15 in which said marker fields comprise bars that are substantially parallel to each other and are substantially perpendicular to the longitudinal axis of the test strip.

29. A reflectance spectroscope, comprising:

a source of illumination for generating light rays;

a support member adapted to support a reagent pad, said support member having a position in which said reagent pad is illuminated by said light rays generated by said illumination source;

a reflectance detector positioned to receive light rays from said reagent pad, said reflectance detector occupying a detection area;

a housing having an aperture formed therein, said aperture being disposed between said illumination source and said reagent pad and being adapted to cause said light rays generated by said illumination source to illuminate an area of said reagent pad;

means for defining a first optical path from said illumination source to said reagent pad in which substantially all singly-reflected light rays generated by said illumination source are prevented from reaching said reagent pad, said means for defining said first optical path having a non-planar wall comprising:

a first wall portion with a specular reflective surface disposed to reflect substantially all of said light-rays generated by said illumination source which reach said first wall portion to an area which does not include said aperture; and

a second wall portion with a specular reflective surface disposed to reflect substantially all of said light rays generated by said illumination source which reach said second wall portion to an area which does not include said aperture;

means for defining a second optical path from said reagent pad to said reflectance detector in which substantially all singly-reflected light rays from said reagent pad are prevented from reaching said reflectance detector, said means for defining said second optical path having a non-planar wall comprising:

a third wall portion with a specular reflective surface disposed to reflect substantially all of said light rays which reach said third wall portion from said reagent pad to an area which does not include said detection area; and

a fourth wall portion with a specular reflective surface disposed to reflect substantially all of said light rays which reach said fourth wall portion from said reagent pad to an area which does not include said detection area; and

means for detecting the misidentification of a diagnostic test strip by determining if said test strip possesses specified reagents, locating the position of said reagents on said test strip and reading the infrared reflectances from the reagent positions to determine if said infrared reflectances are within an acceptable predetermined infrared reflectance range.

30. The reflectance spectroscope of claim 29 further comprising the step of aborting said method if said infrared reflectances for one or more of said reagents are not within said predetermined infrared reflectance range.

31. The reflectance spectroscope as defined in claim 29 wherein at least one of said wall portions is substantially planar.

32. The reflectance spectroscope as defined in claim 29 wherein all of said wall portions are substantially planar.

33. The reflectance spectroscope as defined in claim 29 wherein said housing has a detection aperture formed therein, said detection aperture being disposed between said reagent pad and said reflectance detector.

34. The reflectance spectroscope as defined in claim 32 wherein said means for defining said second optical path comprises at least one edge defined by a pair of wall portions, said edge being substantially aligned with an edge of said detection area and an edge of said detection aperture.

35. The reflectance spectroscope as defined in claim 29 wherein said housing has a first detection aperture formed therein, said first detection aperture having a first edge and a second edge and being disposed between said reagent pad and said reflectance detector so that said edges of said first detection aperture are substantially aligned with a pair of edges of said detection area.

36. A reflectance spectroscope as defined in claim 35 wherein said housing has a second detection aperture formed therein, said second detection aperture having a first edge and a second edge and being disposed between said first detection aperture and said reflectance detector so that said edges of said second detection aperture are substantially aligned with said pair of edges of said detection area.

37. A reflectance spectroscope, comprising:

a source of illumination for generating light rays;

a support member adapted to support a reagent pad, said support member having a position in which said reagent pad is illuminated by said light rays generated by said illumination source;

a reflectance detector positioned to receive light rays from said reagent pad;

means for defining a first optical path from said illumination source to said reagent pad in which substantially all singly-reflected light rays generated by said illumination source are prevented from reaching said reagent pad; and

means for detecting the misidentification of a diagnostic test strip including a determination whether said test strip possesses specified reagents, locating the position of said reagents on said strip and reading the infrared reflectances from the reagent positions to determine if said infrared reflectances are within an acceptable predetermined infrared reflectance range.

38. A reflectance spectroscope as defined in claim 37 additionally comprising a housing having an aperture formed therein, said aperture being disposed between said illumination source and said reagent pad and being adapted to cause said light rays generated by said illumination source to illuminate an area of said reagent pad.

39. A reflectance spectroscope as defined in claim 38 wherein said means for defining a first optical path has a non-planar wall portion comprising:

a first wall portion with a specular reflective surface disposed to reflect substantially all of said light rays generated by said illumination source which reach said first wall portion to an area which does not include said aperture; and

a second wall portion with a specular reflective surface disposed to reflect substantially all of said light rays generated by said illumination source which reach said second wall portion to an area which does not include said aperture.

40. A reflectance spectroscope as defined in claim 39 wherein at least one of said first and second wall portions is substantially planar.

41. A reflectance spectroscope as defined in claim 37 additionally comprising means for defining a second optical path from said reagent pad to said reflectance detector in which substantially all singly-reflected light rays from said reagent pad are prevented from reaching said reflectance detector.

42. A reflectance spectroscope as defined in claim 41 wherein said reflectance detector occupies a detection area and wherein said reflectance spectroscope additionally comprises a housing.

43. A reflectance spectroscope as defined in claim 42 wherein said means for defining a second optical path has a non-planar wall portion comprising:

a first wall portion with a specular reflective surface disposed to reflect substantially all of said light rays which reach said first wall portion from said reagent pad to an area which does not include said detection area; and

a second wall portion with a specular reflective surface disposed to reflect substantially all of said light rays which reach said second wall portion from said reagent pad to an area which does not include said detection area.